

WEST Search History

Hide Items

Restore

Clear

Cancel

DATE: Monday, September 13, 2004

Hide?	Set Name	Query	Hit Count
		<i>DB=PGPB; PLUR=YES; OP=OR</i>	
<input type="checkbox"/>	L22	edge and antialiasing and mask same extent\$3 same raster same order	0
<input type="checkbox"/>	L21	edge same antialias\$3 same mask same extent\$3 same raster same order	0
<input type="checkbox"/>	L20	edge same antialias\$3 same mask same extent\$3 same raster\$3 same order\$3	0
<input type="checkbox"/>	L19	edge antialias\$3 same mask same extent\$3 same raster\$3 same order\$3	189429
		<i>DB=PGPB,USPT; PLUR=YES; OP=OR</i>	
<input type="checkbox"/>	L18	edge same antialias\$3 and raster same order\$3 and mask and extent\$3	17
<input type="checkbox"/>	L17	L16 and alias\$3 and raster\$3 same order43	0
<input type="checkbox"/>	L16	345/626.ccls.	48
<input type="checkbox"/>	L15	L12 and alias\$3 and intersect\$3 and oder same raster\$3	0
<input type="checkbox"/>	L14	L12 and alias\$3 same intersect\$3 and oder same raster\$3	0
<input type="checkbox"/>	L13	L12 and alias\$3 same intersect\$3 same mask\$3 and extent\$3	0
<input type="checkbox"/>	L12	345/611.ccls.	301
<input type="checkbox"/>	L11	345/535.ccls.	91
<input type="checkbox"/>	L10	345/423.ccls.	373
<input type="checkbox"/>	L9	345/422.ccls.	359
<input type="checkbox"/>	L8	345/421.ccls.	363
<input type="checkbox"/>	L7	345/505.ccls.	234
		<i>DB=USPT; PLUR=YES; OP=OR</i>	
<input type="checkbox"/>	L6	l2 and mask\$3 same extent\$3	4
<input type="checkbox"/>	L5	L4 and intersect\$3 and mask and extent\$3	0
<input type="checkbox"/>	L4	L3 and order near4 raster	1
<input type="checkbox"/>	L3	5963210.pn.	1
<input type="checkbox"/>	L2	pixel and intersect\$3 and mask and alias\$3 and raster\$3 near4 order\$3	25
<input type="checkbox"/>	L1	pixel same intersect\$3 same mask same alias\$3 same raster\$3 near4 order\$3	0

END OF SEARCH HISTORY



<http://portal.acm.org/results.cfm?CFID=27276160&CFTOKEN=54866206&adv=1&COLL=...> 9/13/04

schools participating. In fact, the number of schools represented in this year's list has dropped by 65 percent, and only three schools have participated both years. (Three additional schools are represented both years due to abstracts accidentally omitted from last year's list). Since there are limited opportunities to ...

6 Separable image warping with spatial lookup tables

G. Wolberg, T. E. Boult

July 1989 **ACM SIGGRAPH Computer Graphics , Proceedings of the 16th annual conference on Computer graphics and interactive techniques**, Volume 23 Issue 3


Full text available:  pdf(1.99 MB) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

Image warping refers to the 2-D resampling of a source image onto a target image. In the general case, this requires costly 2-D filtering operations. Simplifications are possible when the warp can be expressed as a cascade of orthogonal 1-D transformations. In these cases, separable transformations have been introduced to realize large performance gains. The central ideas in this area were formulated in the 2-pass algorithm by Catmull and Smith. Although that method applies over an important cla ...

7 Leo: a system for cost effective 3D shaded graphics

Michael F. Deering, Scott R. Nelson

September 1993 **Proceedings of the 20th annual conference on Computer graphics and interactive techniques**



Full text available:  pdf(241.27 KB) Additional Information: [full citation](#), [references](#), [citations](#), [index terms](#)

Keywords: 3D graphics hardware, antialiased lines, floating-point microprocessors, gouraud shading, parallel graphics algorithms, rendering

8 Drawing and animation using skeletal strokes

Siu Chi Hsu, Irene H. H. Lee

July 1994 **Proceedings of the 21st annual conference on Computer graphics and interactive techniques**


Full text available:  pdf(2.14 MB)  ps(4.06 MB) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

The use of skeletal strokes is a new vector graphics realization of the brush and stroke metaphor using arbitrary pictures as "ink". It is based on an idealized 2D deformation model defined by an arbitrary path. Its expressiveness as a general brush stroke replacement and efficiency for interactive use make it suitable as a basic drawing primitive in drawing programs as well as windowing and page description systems. This paper presents our drawing and animation ...

9 Quadrature prefiltering for high quality antialiasing

Brian Guenter, Jack Tumblin

October 1996 **ACM Transactions on Graphics (TOG)**, Volume 15 Issue 4

Full text available:  pdf(2.09 MB) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)


This article introduces quadrature prefiltering, an accurate, efficient, and fairly simple algorithm for prefiltering polygons for scanline rendering. It renders very high quality images at reasonable cost, strongly suppressing aliasing artifacts. For equivalent RMS error, quadrature prefiltering is significantly faster than either uniform or jittered supersampling. Quadrature prefiltering is simple to implement and space-efficient; it needs only a small two-dimensional lookup table, even w ...

Keywords: antialiasing, prefiltering

10 Texture-based visibility for efficient lighting simulation

Cyril Soler, F. X. Sillion

October 2000 **ACM Transactions on Graphics (TOG)**, Volume 19 Issue 4

Full text available:  pdf(1.71 MB)

Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

Lighting simulations using hierarchical radiosity with clustering can be very slow when the computation of fine and artifact-free shadows is needed. To avoid the high cost of mesh refinement associated with fast variations of visibility across receivers, we propose a new hierarchical algorithm in which partial visibility maps can be computed on the fly, using a convolution technique for emitter-receiver configurations where complex shadows are produced. Other configurations still rely on m ...

Keywords: convolution, global illumination, hierarchical radiosity, texture-based visibility

11 Managing level of detail through peripheral degradation: effects on search performance with a head-mounted display

Benjamin Watson, Neff Walker, Larry F. Hodges, Aileen Worden

December 1997 **ACM Transactions on Computer-Human Interaction (TOCHI)**, Volume 4 Issue 4

Full text available:  pdf(348.95 KB)

Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#), [review](#)

Two user studies were performed to evaluate the effect of level-of-detail (LOD) degradation in the periphery of head-mounted displays on visual search performance. In the first study, spatial detail was degraded by reducing resolution. In the second study, detail was degraded in the color domain by using grayscale in the periphery. In each study, 10 subjects were given a complex search task that required users to indicate whether or not a target object was present among distracters. Subject ...

Keywords: detail management, high-detail inset, level of detail, object simplification, peripheral degradation, visual search

12 Object-based image editing

William A. Barrett, Alan S. Cheney

July 2002 **ACM Transactions on Graphics (TOG) , Proceedings of the 29th annual conference on Computer graphics and interactive techniques**, Volume 21 Issue 3

Full text available:  pdf(18.90 MB)

Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)


We introduce Object-Based Image Editing (OBIE) for real-time animation and manipulation of static digital photographs. Individual image objects (such as an arm or nose, Figure 1) are selected, scaled, stretched, bent, warped or even deleted (with automatic *hole filling*) - *at the object, rather than the pixel level* - using simple gesture motions with a mouse. OBIE gives the user direct, local control over object shape, size, and placement while dramatically reducing the time require ...

Keywords: animation, image editing, image warping, image-based rendering, texture synthesis

13 Precomputed radiance transfer for real-time rendering in dynamic, low-frequency lighting environments

Peter-Pike Sloan, Jan Kautz, John Snyder

July 2002 **ACM Transactions on Graphics (TOG) , Proceedings of the 29th annual conference on Computer graphics and interactive techniques**, Volume 21 Issue 3

Full text available:  pdf(5.37 MB) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

We present a new, real-time method for rendering diffuse and glossy objects in low-frequency lighting environments that captures soft shadows, interreflections, and caustics. As a preprocess, a novel global transport simulator creates functions over the object's surface representing transfer of arbitrary, low-frequency incident lighting into *transferred radiance* which includes global effects like shadows and interreflections from the object onto itself. At run-time, these transfer functions ...

Keywords: Monte Carlo techniques, graphics hardware, illumination, rendering, shadow algorithms

14 Real-time hatching

Emil Praun, Hugues Hoppe, Matthew Webb, Adam Finkelstein

August 2001 **Proceedings of the 28th annual conference on Computer graphics and interactive techniques**

Full text available:  pdf(6.06 MB) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

Drawing surfaces using hatching strokes simultaneously conveys material, tone, and form. We present a real-time system for non-photorealistic rendering of hatching strokes over arbitrary surfaces. During an automatic preprocess, we construct a sequence of mipmapped hatch images corresponding to different tones, collectively called a *tonal art map*. Strokes within the hatch images are scaled to attain appropriate stroke size and density at all resolutions, and are organized to maintain c ...

Keywords: chicken-and-egg problem, line art, multitexturing, non-photorealistic rendering

15 Capture from images: Capture of hair geometry from multiple images

Sylvain Paris, Hector M. Briceño, François X. Sillion

August 2004 **ACM Transactions on Graphics (TOG)**, Volume 23 Issue 3

Full text available:  pdf(705.59 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Hair is a major feature of digital characters. Unfortunately, it has a complex geometry which challenges standard modeling tools. Some dedicated techniques exist, but creating a realistic hairstyle still takes hours. Complementary to user-driven methods, we here propose an image-based approach to capture the geometry of hair. The novelty of this work is that we draw information from the scattering properties of the hair that are normally considered a hindrance. To do so, we analyze image sequence ...


Keywords: 2D Orientation Detection, Hair Capture, Hair Modeling, Reflectance Analysis, Shape from Shading, Signal Processing

16 Kizamu: a system for sculpting digital characters

Ronald N. Perry, Sarah F. Frisken

August 2001 **Proceedings of the 28th annual conference on Computer graphics and interactive techniques**

Additional Information:

Full text available:  pdf(4.04 MB)

[full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

This paper presents Kizamu, a computer-based sculpting system for creating digital characters for the entertainment industry. Kizamu incorporates a blend of new algorithms, significant technical advances, and novel user interaction paradigms into a system that is both powerful and unique.

To meet the demands of high-end digital character design, Kizamu addresses three requirements posed to us by a major production studio. First, animators and artists want *digital clay* — a ...

Keywords: ADFs, character design, digital sculpting, distance fields, graphics systems, rendering, triangulation, volume modeling

17 [Visibility culling using hierarchical occlusion maps](#)

Hansong Zhang, Dinesh Manocha, Tom Hudson, Kenneth E. Hoff

August 1997 **Proceedings of the 24th annual conference on Computer graphics and interactive techniques**

Full text available:  pdf(597.69 KB) Additional Information: [full citation](#), [references](#), [citations](#), [index terms](#)

Keywords: hierarchical data structures, image pyramid, interactive display, occlusion culling, visibility culling

18 [Adaptive hierarchical visibility in a tiled architecture](#)

Feng Xie, Michael Shantz

July 1999 **Proceedings of the ACM SIGGRAPH/EUROGRAPHICS workshop on Graphics hardware**

Full text available:  pdf(1.67 MB) Additional Information: [full citation](#), [references](#), [citations](#), [index terms](#)

Keywords: hierarchical z buffer, occlusion culling, visibility culling

Results 1 - 18 of 18

The ACM Portal is published by the Association for Computing Machinery. Copyright © 2004 ACM, Inc.

[Terms of Usage](#) [Privacy Policy](#) [Code of Ethics](#) [Contact Us](#)

Useful downloads:  [Adobe Acrobat](#)  [QuickTime](#)  [Windows Media Player](#)  [Real Player](#)